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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/692,368  | 10/23/2003  | Paul Graefenhain     | LAGP:113US          | 9333             |
| 24041   | 7590        | 07/12/2005           | EXAMINER            |                  |
| SIMPSON & SIMPSON, PLLC<br>5555 MAIN STREET<br>WILLIAMSVILLE, NY 14221-5406 |             |                      | POLYZOS, FAYE S     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2878                |                  |

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/692,368

Applicant(s)

GRAEFENHAIN, PAUL

Examiner

Faye Polyzos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,10-12,14,16-18,25-28,31,33,39 and 40 is/are rejected.
- 7) ☒ Claim(s) 3,7-9,13,15,19-24,29,30,32 and 34-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Objections***

1. Applicant is advised that should claim 6 be found allowable, claim 33 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

2. Claim 24 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 24 is not further limiting by moving the location of the shutter in an observation beam path.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-6, 10-11, 14, 16-18, 25-28, 31, 33, 39-40 are rejected under 35 U.S.C. 102(b) as being anticipated by *Amann et al* (US 6,563,113 B1).

Regarding claim 1, Amann discloses a fluorescence microscope having at least one exchangeable filter insert (33a) and at least one illumination device (13) having at least one light source (40), wherein the filter insert is couple by means of a coupling

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apparatus to the illumination device so that in an operating state, no excitation illumination occurs in the fluorescence microscope without the filter insert in a working position (See Generally Figs. 1,5 and 7 and col. 4, lines 8-11, col. 6, lines 2-20 and col. 7, lines 35-57).

Regarding claim 2, Amann discloses the operating state, current delivery to the excitation light source is switchable by mean of coupling apparatus by insertion or removal of the filter insert (col. 4, lines 8-11, col. 6, lines 2-20 and col. 7, lines 35-57).

Regarding claim 4, Amann discloses upon insertion of the filter insert, a shutter (21) for an illumination beam path is switchable by insertion or removal of the filter insert by means of the coupling apparatus (col. 7, lines 2-20).

Regarding claim 5, Amann discloses in the operating state the shutter (21) is switchable by means of an electric motor (col. 7, lines 13-20).

Regarding claim 6, Amann discloses in the operating state the shutter (21) can be opened and held open by means of the electric motor only when the electrical circuit necessary therefor is closed by the apparatus (col. 7, lines 13-20).

Regarding claims 10-11, Amann discloses the shutter (21) is closable by the force of a spring (34) and gravity (col. 7, lines 2-9).

Regarding claim 14, Amann discloses the shutter is embodied as a rotary slide (col. 7, lines 2-20).

Regarding claim 16, Amann discloses wherein at least two filter inserts (15)(16) are arranged on a changeable filter carrier (col. 7, lines 21-34).

Regarding claim 17, Amann discloses wherein different filter inserts can be brought into a working position by manual switching of the changeable filter turret (col. 7, lines 13-20).

Regarding claim 18, Amann discloses the filter insert is constituted from a combination of several individual filters (15)(16) (col. 7, lines 21-44).

Regarding claim 25, Amann discloses the fluorescence microscope is a stereomicroscope (col. 5, lines 59-60).

Regarding claim 26-28, Amann discloses the coupling apparatus is a mechanical apparatus, an electrical apparatus and an optical apparatus (See Abstract and col. 4, lines 8-11, col. 5, lines 59-67, col. 6, lines 2-20 and col. 7, lines 35-57).

Regarding claim 31, Amann discloses upon insertion of the filter insert, a shutter (21) for the illumination beam path (3) is switchable by insertion or removal of the filter insert by means of the coupling apparatus (col. 7, lines 1-20).

Regarding claim 33, Amann discloses the operating state shutter can be opened and held open by means of electric motor only when the electrical circuit necessary therefore is closed by apparatus (col. 7, lines 13-20).

Regarding claim 39, Amann discloses the shutter is embodied as a rotary mechanical stop (col. 7, lines 1-20).

Regarding claim 40, Amann discloses at least two filter inserts can be brought into the working position by motorized switching of the changeable filter turret (col. 7, lines 18-20).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Amann et al* (US 6,563,113 B1) as applied to claim 4 above, and further in view of *Modell et al* (US 6,104,945 A).

Regarding claim 12, Amann discloses the fluorescence microscope comprising a shutter (21) for an illumination beam path is switchable by insertion or removal of the filter insert by means of the coupling apparatus is closable by the force of a spring (34) (col. 7, lines 2-20). Amann does not disclose the shutter is closable by means of elastic materials. Modell discloses the spring is closable by means of elastic materials. Modell teaches when the arm is, for instance charged negatively and the post of the charged electrostatic attraction causes the arm to rotate and expose the perforation to open the optical shutter, the array may be operated by maintaining a given row negatively and scanning the column, which positively charges all pairs of posts 365, to obtain sequential opening and closing of the optical shutter array. As above, the elastic properties of silicon may be relied upon to return the arm to its rest position (through the twisting base 363 spring action), or the charge on the pairs of posts may be reversed before switching to the next column (col. 8, lines 13-28). Therefore, it would have been obvious to modify the apparatus suggested by Amann, to incorporate

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a shutter closable by means of elastic materials, as disclosed supra by Modell, to allow for a more versatile apparatus.

***Allowable Subject Matter***

7. Claims 3, 7-9, 13,15,19-24, 29-30,32,34-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claim 3, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein upon insertion of the filter insert, a dimmer for the excitation light source is switchable by the insertion or removal of the filter insert.

Regarding dependent claim 7, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein in the event of a power failure at the microscope, current delivery to the excitation light source is automatically switched off.

Regarding dependent claim 8, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope where in the event of a power failure at the microscope, the dimmer for the excitation light source is automatically switched on.

Regarding dependent claims 9, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope where in the event of a power failure at the microscope, the shutter is automatically closed.

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Regarding dependent claim 13, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope where in the shutter is closable by magnetic force.

Regarding dependent claim 15, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the shutter is embodied as a linear mechanical stop.

Regarding dependent claim 19, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein filter inserts is embodied with switching cam which actuates a sensitive microswitch with closing function.

Regarding dependent claim 20, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein filter inserts is equipped with one permanent magnet, in the operating state, actuates a magnetic switch with a closing function.

Regarding dependent claim 21, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein filter inserts is equipped with electrically conductive contact surface, which acts as a switch.

Regarding dependent claim 22, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein filter inserts is equipped with an electrically conductive coating which acts as a switch.

Regarding dependent claim 23, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein filter inserts is embodied with optical signal generator which makes a switch switchable.



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Regarding dependent claim 24, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the shutter is arranged in the observation beam path and not in the illumination beam path.

Regarding dependent claim 29, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the coupling apparatus is a magnetic apparatus.

Regarding dependent claim 30, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein upon insertion of the filter insert, a dimmer for the excitation light source is switchable by the insertion or removal of the filter insert.

Regarding dependent claim 32, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the shutter is switchable by means of electromagnet.

Regarding dependent claim 34, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the shutter can be opened and held open by means of electromagnet only when the electric circuit necessary therefor is closed by apparatus.

Regarding dependent claims 35-37, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein in the event of a power failure the shutter is automatically closed by spring, gravity and by means of elastic materials.

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Regarding dependent claim 38, the prior art, as stated supra, does not disclose or fairly suggest of a fluorescence microscope wherein the shutter is closable by magnetic force.

**Conclusion**

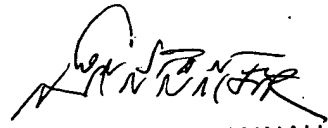
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Polyzos whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FP

  
CONSTANTINE HANNAHER  
PRIMARY EXAMINER  
GROUP ART UNIT 2878